Indoor Radon Program

Granite Counter Tops and Radon

What about radon released from granite counter tops?

1. Does the Health Physics Society (HPS) believe there is a danger of radon gas or associated radiation being emitted from granite counter tops?

HPS Radiation from Granite Countertops Summary:
Assuming a relatively tight house with an air change rate of 0.5/hr and using average measured dose rates from granite countertop slabs, the estimated radon concentration in kitchen air would be 0.13 pCi/L. This concentration is less than one-eighth the average radon gas concentration in U.S. homes and is well below the Environmental Protection Agency (EPA) guideline of 4 pCi/L.

2. Does the EPA believe there is a danger of radon gas or associated radiation being emitted from granite counter tops?

Granite is a natural mineral formed by the earth's geological processes. It is quarried and processed to produce commercial products such as counter tops. It is possible for any granite sample to contain varying concentrations of uranium that can produce radon gas, a source of alpha and beta particles and gamma rays. Some granite used for counter tops may contribute variably to indoor radon levels. At this time, however, EPA does not believe sufficient data exist to conclude that the types of granite commonly used in counter tops are significantly increasing indoor radon levels. Some granite may emit gamma radiation above typical background levels. While radiation levels are not typically high, measurement from different granite types may reveal higher than expected levels on a case-by-case basis.

3. What advice does the EPA have about radon for consumers who have granite counter tops?

While natural minerals such as granite may occasionally emit radon gas, the levels of radon attributable to such sources are not typically high. EPA believes the principal source of radon in homes is soil gas that is drawn indoors through a natural suction process. To reduce radon risk you should first test the air in your home to determine the radon level.

4. How do I test my granite counter tops for radon?

If you are concerned about the possibility of your counter tops adding to or causing increased radon in your home, you can have your home tested by a certified tester or you can test it yourself by using do-it-yourself (DIY) radon test kits.

A list of California certified radon testers can be found by clicking on the Testers (PDF) link at the following webpage:

http://www.cdph.ca.gov/HealthInfo/environhealth/Pages/RadonServiceProviders.aspx

To test for radon from your granite counter tops yourself, purchase three radon test kits and follow the DIY Instructions for Testing Granite Counter Tops described below.

Inexpensive DIY radon test kits can be obtained by calling the toll-free number 800-324-5928. After calling the toll-free number, press 1 and follow the instructions to purchase a California radon test kit. The cost for the radon test kit is seven dollars ($7.00). Alternatively, a California radon test kit can be obtained by submitting a request, along with credit card payment, at www.drhomeair.com beginning on the following webpage:

https://secure.flipmedia.com/apalab_secure/drha_order_carw5.html
Disable all pop-up blockers on your computer prior to entering data on the order form.

DIY Instructions for Testing Granite Counter Tops

Set one test kit approximately three feet from the counter but not directly on the counter; set one test kit at the boundary of the kitchen and the adjoining room, and set one test kit in a room farthest from the kitchen (preferably not a bathroom). Record the serial numbers of each test kit and the locations so you know where each of the test results came from.

The results of these three tests will indicate whether radon is higher in the vicinity of the granite counter tops as compared to the remainder of your home.

EPA's recommended action level is 4 picocuries (pCi/L). If your house has 4 pCi/L or higher, EPA recommends that you take action to reduce the level of radon.